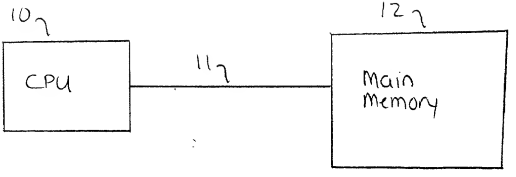
TOSTOO-20547850



PRIOR ART

FIG. 1

T09090 '20Eh2860

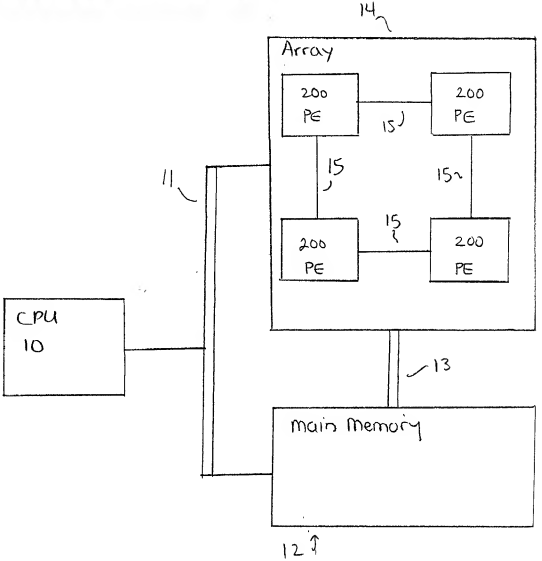


FIG. 2

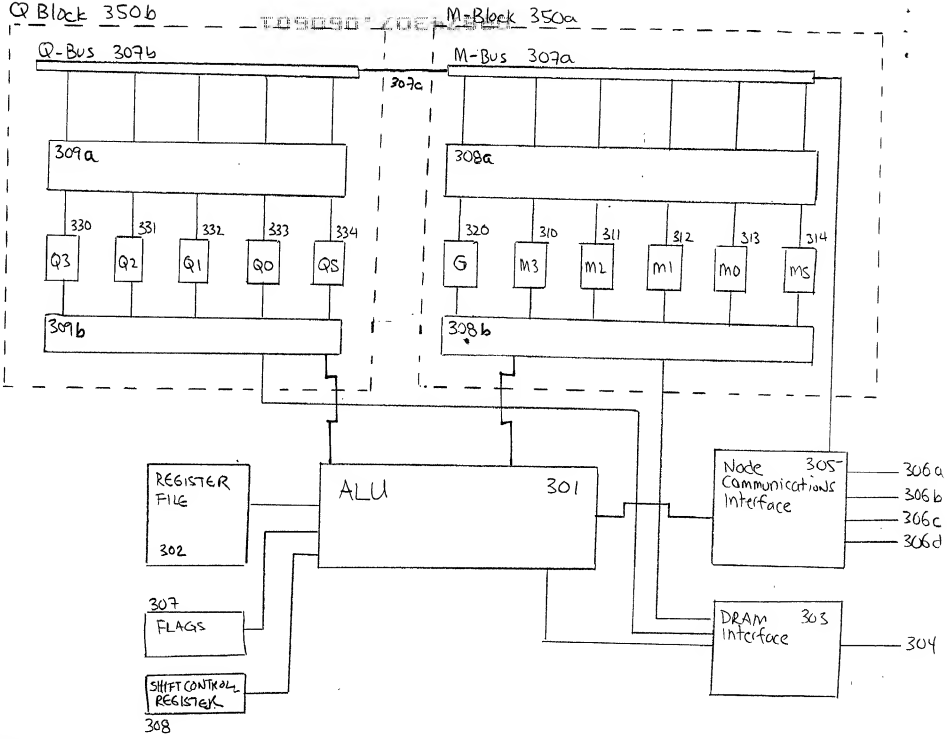

Q Block 350b
M-Block 350a
Q-Bus 307b
M-Bus 307a
307c
309a
308a
330
331
332
333
334
320
310
311
312
313
314
Q3
Q2
Q1
Q0
QS
G
M3
M2
M1
M0
MS
309b
308b
REGISTER FILE
302
ALU
301
Node Communications Interface
305
306a
306b
306c
306d
307
FLAGS
DRAM Interface
303
304
SHIFT CONTROL REGISTER
308

Fig 3

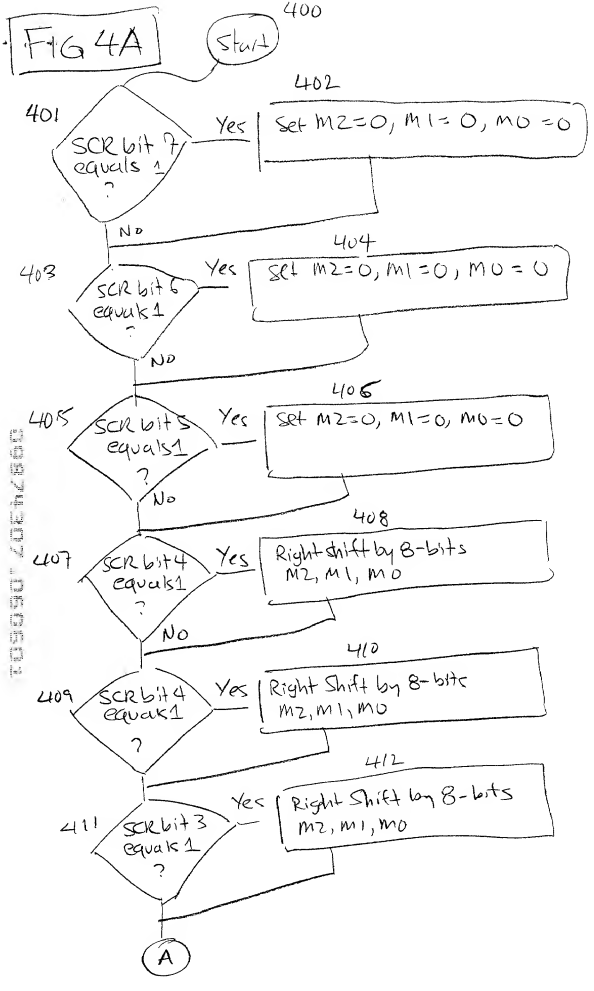


FIG 4A
400
Start
401
SCR bit 7 equals 1 ?
Yes
402
Set M2=0, M1=0, M0=0
No
403
SCR bit 6 equals 1 ?
Yes
404
Set M2=0, M1=0, M0=0
No
405
SCR bit 5 equals 1 ?
Yes
406
Set M2=0, M1=0, M0=0
No
407
SCR bit 4 equals 1 ?
Yes
408
Right shift by 8-bits M2, M1, M0
No
409
SCR bit 4 equals 1 ?
Yes
410
Right Shift by 8-bits M2, M1, M0
411
SCR bit 3 equals 1 ?
Yes
412
Right Shift by 8-bits M2, M1, M0
A

FIG 4B

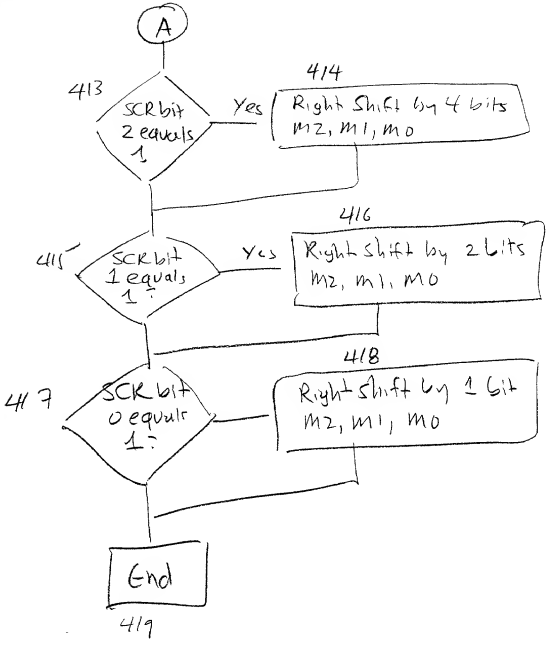
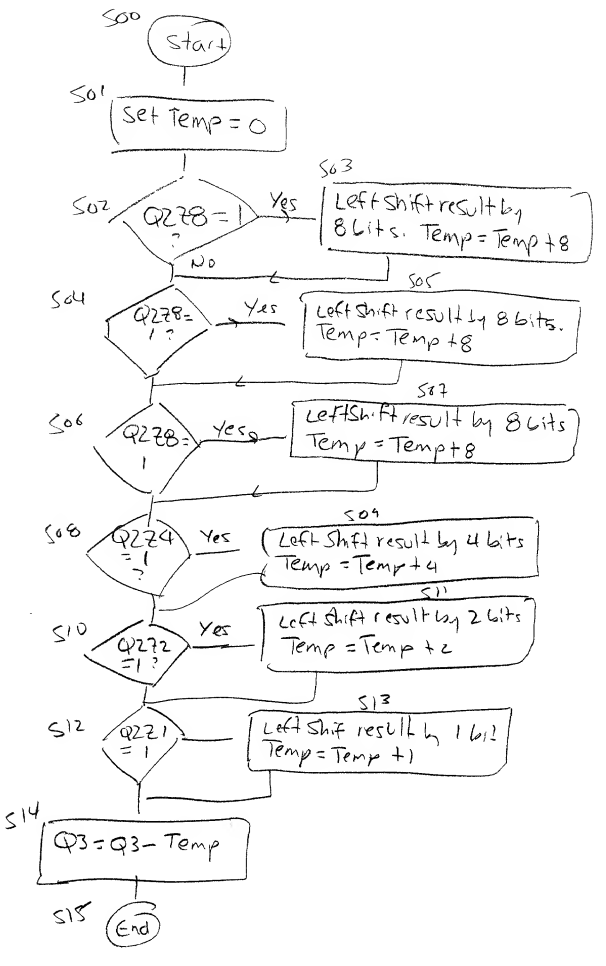

A
413
SCR bit 2 equals 1 ?
Yes
414
Right Shift by 4 bits M2, M1, M0
415
SCR bit 1 equals 1 ?
Yes
416
Right shift by 2 bits M2, M1, M0
417
SCR bit 0 equals 1 ?
418
Right Shift by 1 bit M2, M1, M0
End
419

FIG 5


S00
Start
S01
Set Temp = 0
S02
Q2Z8 = 1 ?
Yes
S03
Left Shift result by 8 bits. Temp = Temp + 8
No
S04
Q2Z8 = 1 ?
Yes
S05
Left Shift result by 8 bits. Temp = Temp + 8
S06
Q2Z8 = 1
Yes
S07
Left Shift result by 8 bits Temp = Temp + 8
S08
Q2Z4 = 1 ?
Yes
S09
Left Shift result by 4 bits Temp = Temp + 4
S10
Q2Z2 = 1 ?
Yes
S11
Left Shift result by 2 bits Temp = Temp + 2
S12
Q2Z1 = 1
S13
Left Shift result by 1 bit Temp = Temp + 1
S14
Q3 = Q3 - Temp
S15
End